"He Won't Use Condoms": HIV-Infected Women's Struggles in Primary Relationships With Serodiscordant Partners

Patricia E. Stevens, PhD, RN, Loren Galvao, MD, MPH

We investigated the sexual behaviors of 55 HIV-infected women in Wisconsin who narrated their lives in 10 interviews over 2 years during 2000 to 2003. We sought to examine the interpersonal situations in which sexual risk occurred. During the prospective period, 58% (32) were abstinent and 24% (13) practiced safe sex exclusively. The remaining 18% (10) engaged in unprotected sexual intercourse, but only in primary partnerships, almost all of which were with serodiscordant partners. We focused on experiential detail and narrative depth of 10 women who had sex without condoms. These narratives demonstrate how the women attempted to initiate condom use but engaged in unprotected sexual intercourse regularly at the insistence of their partners. Consequently, these women lived in trepidation of causing their partners' sickness and death. (*Am J Public Health*. 2007;97:1015–1022. doi:10.2105/AJPH.2005.075705)

Although broad efforts at primary prevention (i.e. prevention efforts targeted at persons not infected with HIV) of HIV were prominent in the United States during the first 2 decades of the pandemic, the Centers for Disease Control and Prevention are now emphasizing secondary prevention interventions targeted to those already infected. ^{1,2} A substantial number of persons who are HIV infected continue to engage in behaviors that place others at risk for infection, yet gaps remain in specific knowledge about women who are HIV infected and the factors that impede or facilitate their capacity to reduce risky sexual behaviors. ^{3–5}

In our longitudinal qualitative study, we investigated the sexual behaviors of 55 women who were HIV infected. We used narrative analysis techniques to compare and contrast the events, players, contexts, and women's evaluations of their sexual lives since diagnosis, focusing particularly on how they managed HIV transmission risk during the 2-year prospective data collection period. We examined the interpersonal situations in which sexual risk occurred, identifying how many women in the sample were sexually active during the 2-year study period and who among them did not use condoms. From the perspective of those women who engaged in sexual intercourse without condoms, we

analyzed efforts at condom negotiation and the meanings sexual risk held for them.

BACKGROUND

A majority of women who are HIV infected in the United States remain sexually active after they are diagnosed, and whether they practice safe sex or not has been the subject of several studies.⁶ Findings from the late 1990s indicated that anywhere from 22% to 38% of HIV-infected women practiced unprotected sexual intercourse.^{7–12} In more recent studies, reported rates of unprotected sexual intercourse are only somewhat lower: 17% to 35%. 6,13-17 For instance, data from a national probability sample of persons receiving medical care for HIV indicated that 17% of women reported having unprotected sexual intercourse without disclosing their positive HIV status to their partners. 14 In a more targeted study, 35% of a convenience sample of 80 infected women attending HIV outpatient clinics reported having unprotected intercourse or a newly diagnosed sexually transmitted infection in the previous 6

What provokes sexual risk taking among women who are HIV infected? Growing evidence suggests that the proliferation of HIV

treatment options over the past decade may have decreased individuals' concerns about HIV transmission. Findings from the Women's Interagency HIV Study suggest that women engage in more unprotected sexual intercourse after they are on highly active antiretroviral treatment. ¹⁸ Likewise, findings from the California Partners Study II suggest that when an infected woman's viral load and symptoms are under control, she is more likely to engage in unprotected sexual intercourse. ^{19,20}

Interpersonal dynamics and psychosocial barriers to condom use that may impinge on the sexual lives of HIV-infected women have not been well explored. The realities of relationships between men and women are critically important, however, in shaping HIVinfected women's behaviors.21 Introducing condoms into relationships where women are financially dependent or where traditional gender roles prevail can be difficult for women in general.^{22,23} How much more difficult might it be for women who are HIV infected? In addition, unprotected sexual intercourse with a primary partner may not have the same meaning or implications for the woman that it does with a casual partner.4,24,25 It is important to understand the situations in which unprotected sexual relations occur if we are to accomplish secondary prevention of HIV transmission.²⁶ Such understanding can best be achieved through qualitative studies that elicit and systematically compare individuals' stories of what has happened to them.

METHODS

Sharing stories builds rapport and allows research participants some control over the flow and direction of research activities.²⁷ Personal narratives communicate the meanings

events have for individuals and the interpersonal contexts in which they occur.^{28–31} Narrative designs also tap into people's everyday ways of expressing themselves, making the research accessible to women of all levels of literacy and education.³² Longitudinal narrative data collection allows trust to be built over time and repeated contact, facilitating depth of disclosure about such sensitive topics as sexual behavior. Longitudinal narratives collected over years also can shed light on obstacles to risk reduction that women face as they live longer and more productive lives with HIV, on how changing circumstances such as illness exacerbations or interventions by

health care providers can affect HIV-infected women's behaviors, and on the long-term resources and support women who are HIV infected need to sustain secondary prevention of HIV transmission.

Using a repeated qualitative narrative interview design, we conducted a longitudinal study of HIV-infected women from urban and rural Wisconsin, following 55 participants through a series of 10 interviews over 2 years. Using staggered enrollment, data collection occurred from 2000 to 2003. The purpose of the entire study was to develop an in-depth understanding of women's experiences living with HIV. We gathered data

TABLE 1—Characteristics of HIV-Infected Women With Serodiscordant Primary Partners: Wisconsin, 2000–2003

Characteristics	All HIV-Infected Women (N = 55)	Women Who Practiced Unprotected Sexual Intercourse (n = 9)	Women Who Practiced Safe Sex or Sexual Abstinence (n = 9)
Ethnicity/race			
African American	29	5	4
White	20	4	3
Hispanic	4	0	2
American Indian	2	0	0
Mean age, y	41	37	39
Mean annual household income, \$	14 000	17 000	18 400
Mean household size	3.5	3	4
Education			
Less than high school diploma	18	3	3
High school diploma or GED	13	2	2
Some college	19	4	4
College degree	5	0	0
Residence			
Urban	40	6	8
Rural	15	3	1
Years since HIV diagnosis (range)	7 (1-21)	7 (2-13)	7(1-10)
Stage of disease			
Asymptomatic HIV	8	1	1
Symptomatic HIV	26	6	4
AIDS	21	2	4
On HAART medication			
Yes	45	6	8
No	10	3	1
Transmission category			
Heterosexual sex	41	8	7
Injection drug use	13	1	2
Blood transfusion	1	0	0

Note. GED = general equivalency diploma; HAART = highly active antiretroviral therapy.

focused on the vital issues of accessing health care and social services, managing symptoms, adhering to medical regimens, reducing sexual and drug use risks, and dealing with poverty and drug abuse. Although we tracked experience over time for each of these issues, we report on data about sexual risk only.

To recruit a racially diverse sample of 55 women, we used community-based purposive sampling, a deliberative process wherein participants are targeted for the rich information they are likely to yield about study phenomena. Inclusion criteria specified that participants be women at least 18 years of age, conversant in English, and self-reported as HIV infected. The targeted chain referral sampling we used depended on personal contact and invitation from trusted community members and service providers. 33,34 In Table 1 we summarized the demographic characteristics of the total sample and of the subsamples relevant to our findings about sexual risk. Eleven women were unable to complete all 10 interviews in the series because of death, illness exacerbation, or relocation. Demographically, these 11 women were not significantly different from the 44 who completed all the interviews. A total of 475 interviews were conducted.

For each participant, 10 face-to-face 2-hour tape-recorded interviews were conducted at systematic intervals by a consistent interviewer in a private setting of the participant's choice. Women received a modest incentive of \$30 at each interview. Informed consent was obtained before data were collected. Interviewers had doctoral degrees and were trained and experienced in narrative interviewing. Interviewers posed open-ended, story-eliciting questions related to the specific aims of the study. General questions were asked in early interviews: What about your life has changed since you have been living with HIV? How has your sexual life been affected? What has been most difficult about sex since you have been diagnosed with HIV? Can you tell me about your mate and what life is like with him? Interviewers followed up on sexual narratives in subsequent interviews and inquired about what had happened between interviews. Interviewers and participants discussed more sensitive topics as rapport increased, including assertiveness in

sexual relations, efforts to use condoms, and episodes of unprotected sexual intercourse.

Interviews were transcribed verbatim and imported into NVivo 7 (QSR International, Melbourne, Australia), a specialized computer program for qualitative research. The automated data handling and powerful search and retrieval mechanisms of this software facilitated data management. We first conducted a within-case analysis. For each participant, we retrieved the participant's narration of her sexual life as an HIV-positive woman over her series of interviews, coding content and context in a dialectical process, examining reported events as well as the participant's interpretations of what had occurred. 35-38 Next, we did an across-case analysis, searching for similarities and differences among participants in what they related about their sexual lives since HIV diagnosis. We constructed qualitative matrices, plotting story elements across study participants and comparing each participant's sexual experiences with every other participant's sexual experiences. We identified patterns apparent across the sample for sexual events, behaviors, emotional responses, and beliefs, as well as women's interpretations of their partners' behaviors and perceptions of their own responsibility in sexual matters. Lastly, we selected exemplar narratives and interview excerpts that best illustrated these patterns.

Combining within-case and across-case approaches to qualitative data produces more contextually grounded, transferable findings. ³⁹ To further support the authenticity of findings and auditability of analytic processes, we (1) engaged in interrater reliability activities as we created and applied codes, (2) returned to full transcripts for grounding sexual behavior data, (3) wrote memos about our analytic decisionmaking, and (4) conducted participant validation exercises.

RESULTS

Sexual Activity and Use of Condoms in the Total Sample

During the 2-year prospective data collection period, self-reports of the 55 participants indicated that 32 (58%) were completely abstinent, 13 (24%) used condoms every time they had sex, and 10 (18%) had sex on a

TABLE 2—HIV-Infected Women's Sexual Activity, by Primary Partner Status, Wisconsin, 2000–2003

Primary Partner Status	Abstinent (n = 32), No. (%)	Safe Sex Exclusively (n = 13), No. (%)	Unprotected Sex (n = 10), No. (%)
No primary partner	26 (47)	6 (11)	0 (0)
HIV-positive primary partner	4 (7)	0 (0)	1 (2)
HIV-negative primary partner	2 (4)	7 (13)	9 (16)

regular basis without using condoms (Table 2). Having sex without using condoms occurred within primary partnerships only. Those women who were not in primary partnerships were either abstinent or practiced safe sex with casual partners. Those who were in primary partnerships were monogamous; if they had sex, it was only with a primary partner.

To examine the situations in which sexual risk occurred, we focused on those 10 participants who engaged in unprotected sexual intercourse. One of these women stood out from the others, her primary partner was HIV infected (Table 2). She had lived with an HIV diagnosis longer than anyone else in the study and was among the sickest, combating opportunistic infections throughout the study period. She related that when she and her partner had first become sexually involved, they used condoms. But after a while, he insisted on having unprotected sexual intercourse because he disliked condoms so much. Although she believed it unwise, she acquiesced. She communicated no apprehension or guilt:

I could get his strain of the virus or he could get mine. But I just don't care because I'm so far gone already anyway. My immune system is shot. I've been full-blown AIDS for 8 years. How much worse can it get?

Sexual narratives of the other 9 who engaged in unprotected sexual intercourse evidenced markedly different patterns from that one. These women had primary male partners who were HIV negative. Although they engaged in unprotected sexual intercourse on a regular basis in these intimate relationships, they did so reluctantly. They tried to convince their partners to use condoms but had no success. Consequently, they experienced significant trepidation about passing on the

virus. In contrast to the first woman mentioned, these women seldom referred to their health status when talking about sexual activities. Results from analyses of their sexual narratives are presented in experiential detail and narrative depth in the next several sections. We conclude our findings by contrasting these sexual narratives with those of participants who were also involved with HIV-negative men but who did not engage in unprotected sexual intercourse.

Narrative Exemplar of Sexual Risk

The following account from the within-case analysis illustrates how 1 woman struggled over condom use with her HIV-negative partner during the 2-year study period. The participant was White and 40 years old at enrollment. She had been diagnosed with HIV for 13 years, married for the last 5. She was on a highly active antiretroviral treatment regimen. Her major symptoms were fatigue, joint pain, and lypodystrophy (complex syndrome involving fat redistribution). When she talked about her marriage, the points she emphasized were how much her husband loved her, the leisure activities they enjoyed together, and their compatible worldviews. She was not at ease with their sexual life, however. Early in the study, she described her emotional reactions: "My husband refuses to use condoms. We've been having unprotected sex the entire time we've been together-5 years-and he's still HIV negative. But that doesn't mean it can't happen. I get so upset about it. It's so sad to me that my husband won't use a condom."

Throughout the study period, she remained distressed about her husband's refusal to engage in safe sex with her, speaking often about trying to "talk him into" using condoms. Contention about condom use seemed

to peak about midway through the study. During the fourth interview, she reported how she had lost her temper with him the week before: "I showed him all my meds and I said, 'Do you want to take all these?' I shook the pill bottles in front of his face. But you can't make him do anything. I'm so scared he'll get infected." During the fifth interview, she said, "We argue about condoms all the time. It is an issue almost weekly."

In the second year of the study, she talked her husband into accompanying her to an appointment with her HIV care provider, hoping that a professional might be able to convince him to use condoms: "I had my husband come in and talk to my doctor. She gave him an ass chewing about putting himself at risk for HIV infection. The only thing he agreed to was getting tested every 6 months. But he still won't use condoms." She blamed herself in part for his refusal because she had never been ill from HIV-related opportunistic infections. If she had been ill, she reasoned, her husband might have understood the risk posed by unprotected sexual intercourse: "He's never seen me sick. If he would see me sick, then it might be different. Maybe if I got sick, if I ended up in the hospital, he'd want to use a condom."

In the final interviews, she remained heart-sick about the possibility of passing the virus to her husband. She reflected on the many times she had considered resisting his wishes for unprotected sexual intercourse but was unable to do so because of her gratitude for his kindness and acceptance: "I could say to him, 'Look, we're going to use a condom, otherwise you're not getting any.' But my husband really likes sex. He is a very good lover. He's gentle. He's loving. I'm in awe sometimes because he wants to be with me no matter the HIV. You see, I prayed to God to send me someone who would accept that I have HIV. And God sent me my husband."

Interpersonal Situations in Which Sexual Risk Occurred

Longitudinally, there was remarkable similarity in the sexual narratives of the 9 HIV-infected women who had unprotected sexual intercourse with serodiscordant primary partners. Contemporaneous stories throughout the 2-year data collection period were about

negotiating for condom use, making sense of partners' resistance to condom use, and living with the responsibility and guilt of having unprotected sexual intercourse.

Negotiating for condom use. These 9 women tried very hard, over months and sometimes years, to negotiate condom use. They made concerted and repeated efforts to talk with their partners, trying to reason with them about the importance of safe sex. What became apparent in the interviews was a common trajectory of events in which talking about condom use degraded into arguments. Arguments led women to acquiesce to their partners' demands, and episodes of unprotected sexual intercourse occurred. After multiple arguments, resulting in multiple episodes of unprotected sexual intercourse, women gave up. An uncontested pattern of sexual risk followed.

Excerpts from their interviews describe the process. Early on in the study period, women said things such as the following:

We talk about it all the time. I'm always telling him, "Please, for me, use protection." But he won't.

I've talked to him and talked to him until I'm blue in the face. I get nowhere. He knows I want him to use condoms. I can't do no more than that.

He hates the condoms. In his mind he sees absolutely no reason. I try to change that way of thinking with him, but I'm not winning. I keep trying to tell him I'm looking out for his best interests. His reply to me is "I'm as happy as I've ever been in my life. You cannot take that away from me." But I'm the party that carries the HIV, so that makes it hard.

In later interviews, it became increasingly clear that condom use was the source of recurring arguments. Women were continually frustrated by their male partners' unwillingness to identify with their concerns about the need for safe sex:

It pisses me off when he won't wear a condom after all I've tried to tell him.

I don't want to have sex without a condom. My boyfriend is angry with me about that, and that's why we argue. Having this disease changed my whole life. And he just doesn't understand when I try to explain it to him, that he needs to use protection. He won't listen. He just blocks me out.

Their emerging narratives revealed a vicious cycle that was set into motion when sexual intimacy was initiated. The woman's request for condom use was rebuffed. She pleaded. He got angry. She was silenced. He persisted. She capitulated. And they had unprotected sexual intercourse. Then she lived with the worry and guilt:

It bothers me that he won't use protection. And I tell him that all the time. And when I tell him that, he gets angry. He gets so upset that I have to leave it alone. Then, we have sex the way he wants. It would be better not to be with him. Then I wouldn't have all the guilt feelings I go through because he won't use condoms.

I know I have to take charge and use condoms. But it is a hard problem. I want to be with this person. I want to make it work with him. But he doesn't want to use a condom. I've tried over and over. He gets mad. He gets to hollering and screaming, and that upsets me. What else can I do? I give in.

After living with this level of contention for some time, women eventually gave up talking and arguing about sexual activity. Later interviews indicated that they settled into a pattern of having unprotected sexual intercourse:

He won't use condoms. It has been 3 years we will be together, and he just won't. I let him have his way now. I don't even talk about it anymore.

I can't say no to sex. I've already tried, and it doesn't work. And I don't want to keep fighting with him. So I don't even bring up condoms anymore.

Making sense of partners' resistance to condoms. These women tried to make sense of their partners' refusal to use condoms. As 1 woman said, "You would think that most men would want to use protection when the woman has HIV." They paid attention to the reasons their partners offered and drew some of their own conclusions about men's motivations for wanting unprotected sexual intercourse. The rationales they saw operating in their partners' actions included love, denial of risk, God's will, desire for full sexual pleasure, and control.

Some partners presented their refusal to use condoms as issuing from their love, an appeal that caused a great deal of consternation for these women:

He says he loves me so much that if I'm going to die, he's going to die, too.

I want him to wear a condom because I'm infected. He says, "I don't care about the HIV.

I love you." But I care. I don't want to be responsible for his death.

He says he loves me and that's it. That's all. End of story. Whatever is going on with me is going on with him because he's my husband. I'm married to him and nothing is going to change that. I tell him he is hurting himself by not using protection. He says that's not for me to say.

Some women did feel better loved, despite the conflict it posed:

Because he wants sex without a condom and he knows I have HIV, that's the reason I know he loves me. And that is all I ever wanted in a man, to feel that way about me. But now it scares me to death. The bottom line is I'm responsible because I'm not protecting him from getting HIV.

Some men did not believe they could be infected by their partners:

My husband is HIV negative after 8 years of having sex without a condom, so he thinks it can't happen. He thinks he is invincible. He read in the newspaper that the spread from women to men is real low. I want to believe that, too, but what if it's wrong?

In one case, a participant was convinced by her partner that HIV transmission was a matter of supernatural fate. Although she shared his beliefs about the supremacy of God's will over human action, she was still troubled:

He is 50, and he says he done lived his life. If something happens, it just happens. That is his theory of it. He says he will just take it [HIV] from God if it happens. I was trying to have him use condoms, but then he even convinced me that if it is God's will, then it will happen. Nothing we can do. But I keep feeling guilty expect it.

Some men were direct about the loss of sexual pleasure they experienced when using condoms, and women wanted to please their partners:

It's hard when you love your partner and he doesn't see unprotected sex as risky. All he sees is—"I can't feel it through a condom." He says to me, "Don't you want to feel me?" And I say, "Yeah, I want to feel you, but I don't want to kill you." It is so scary. I want us to enjoy each other, but is this 20, 30 minutes of lust worth the rest of his life?

Sometimes women perceived a wish to control them in partners' refusals to use condoms:

He is obsessed with me. He says if he can't have me, no other man can. It's the thought of taking control of my body, that's why he won't use a condom

It's all of me or nothing. He's got to have all of me, and that means sex flesh to flesh.

He thinks that if I have a child by him that I will never leave him. So, he won't use condoms. I don't want no more children, so I got the Norplant. I begged the doctor not to tell him.

Living with the responsibility and guilt. Every woman in this subsample feared that eventually her HIV-negative partner would become HIV infected and that she would be responsible for his sickness and death:

The person I love is going to get sick because he loved me. I have that on my head all the time.

He won't take precautions. He's going to die. Nothing worse I could do but take the gun and shoot him in his head. Because he's going to die.

It's so hard when he won't use a condom, knowing that I would be responsible for him dying.

Participants were terribly troubled by worry and guilt at having committed acts of unprotected sexual intercourse:

I feel responsible about having unprotected sex. I don't want anyone to go through what I've been through with HIV. And that eats me up inside, more so than me having HIV myself. My husband acts like it's not an issue, but it is. I don't want it on my conscience that I hurt a single solitary soul, intentional or not intentional.

The hardest thing is I feel so bad that I could pass this HIV along to him. I don't wish it on my worst enemy. It is such a damaging disease, a deadly disease. That lays a heavy burden on me because I feel responsible. And I feel helpless. I know I am supposed to take charge.

Absence of Health Care Providers

Health care providers did not figure prominently in the narratives that these 9 women told. Many urged and cajoled partners to come with them to health care appointments so that a doctor or caseworker could talk with them about the importance of safe sex. The women hoped a professional could have an influence they were unable to, perhaps by bullying their partners into condom use. But partners held onto their objections:

I asked him to see my doctor. I thought that being a man, my doctor could bitch at him and have a better chance than me of making him use condoms.

I had him talk to the counselor, a Black man at that. The counselor said, "No glove, no love."

But he said, "No, I love her for her, and I don't want any condoms."

In a couple of circumstances, interventions by health care providers seemed to increase the distress surrounding condom use:

My psychiatrist started talking to him about protection. He got real pissed off about that. He said he don't like nobody telling him what to do about having sexual relations. Let him do what he feels he wants to do.

The counselor gave him some condoms. And he gave the condoms right back. He said, "You can take these condoms and give them to somebody who needs them." The counselor said, "No, you are going to need them." My fiancé got mad. He said, "I'm going to live my life the way I always have. You aren't going to be telling me what I need to do."

Other Women With Serodiscordant Partners

Although these findings have focused on situations in which sexual risk occurred, there were 9 other women in the study who had serodiscordant primary partners; 7 of them practiced safe sex exclusively, and the other 2 were abstinent during the study period (Table 2). When comparing all the participants who had serodiscordant primary partners, the 9 women who practiced safe sex and the 9 who did not, we were unable to find evidence that condom use varied with women's physical health. Rather, it was interpersonal dynamics in their primary relationships that differentiated those who used condoms from those who did not.

The subsample of women with serodiscordant partners who always used condoms or were abstinent did not experience pressure from male partners to engage in unprotected sexual intercourse. Either their partners were receptive to their requests for consistent condom use, or they were mostly absent from their lives. Four described their partners as having "no problem using condoms" and being "committed to safe sex." One reported that she was so frightened of transmitting the virus that she would not engage in sex with her partner at all, and according to her account, this was acceptable to him. The other 4 reported that their primary male partners were incarcerated during much of the study period, essentially eliminating the potential for struggle about condom use. These 9 women over 2 years of interviews did not

mention arguments about condom use or worry about HIV transmission.

DISCUSSION

Most studies investigating the sexual behaviors of women who are HIV infected indicate that the majority of these women are sexually active. ^{6,14,15} In our study, however, the majority (58%) was not sexually active over the 2 years of prospective data collection. Eighteen percent of the total sample engaged in unprotected sexual intercourse, a proportion similar to that found in previous research. ^{6–17} Findings from our study are markedly different from those of previous research, however, in that they provide experiential detail and narrative depth to an understanding of the interpersonal situations in which sexual risk occurs for women living with HIV.

Unprotected sexual intercourse occurred only in the context of primary partnerships, almost all of which were serodiscordant; that is, the male partners involved were HIV negative and continuously refused to use condoms. Not all women in serodiscordant primary partnerships practiced unprotected sexual intercourse. In fact, in our study half of the women who were partnered to HIVnegative men practiced safe sex exclusively or declined sexual activity altogether. What made their circumstances different was not that their symptoms were any more or less under control than those who practiced unsafe sex, as some researchers have found. 18-20 Rather, the interpersonal dynamics of their relationships were different. Their primary male partners were agreeable to consistent condom use or were simply not present in their daily lives.

The women in serodiscordant relationships who did engage in unprotected sexual intercourse on a regular basis did so reluctantly, always fearful of passing the virus to their male partners. For them, unprotected sexual intercourse meant that they might cause their partners' sickness and death from AIDS. Health care providers were almost absent in these narrations about sexual risk, except as occasional bit players called on to coerce condom use.

These findings suggest that HIV-infected women like those in our study do not

carelessly engage in sexual risk; rather, they are well informed and deeply troubled by sexual risk. Our findings also suggest that women who are HIV infected do not wish to do harm when having sex without a condom; rather, they actively resist posing risk to anybody else. Under repeated circumstances of interpersonal duress, they give in to more dominant male partners. They try to understand why their HIV-negative partners will not use condoms and try over and over to convince these partners of their necessity. Unsuccessful in their efforts to reduce sexual risk in their relationships, they live with a sense of doom about their actions. If these data are any indication of the struggles at least some HIV-infected women may experience in serodiscordant relationships, then there are a great many unmet needs to which compassionate and knowledgeable health care providers and the systems in which they work could respond.

Recommendations

Our first recommendation to address unmet needs pertains to interpersonal conflicts over the issue of HIV infectivity. The women were convinced of the potential for transmission and were fearful about it all the time. Conversely, some of their primary partners did not seem to believe that female-to-male HIV transmission was all that likely. The men's concrete experience of remaining HIV negative over months or years of engaging in unprotected sexual intercourse apparently reinforced their feelings of invulnerability. Data derived from US samples of HIV-serodiscordant couples indicate that, indeed, female-tomale sexual transmission of HIV is significantly less efficient than male-to-female and male-to-male.4 Female-to-male probability of HIV-1 transmission has been reported as 0.001 or less per coital act, 40,41 but the overall risk of transmission compounded over a large number of unprotected sexual encounters in long-term, HIV-serodiscordant heterosexual couples is much higher. 19 It is incumbent on health care providers to make this distinction comprehensible for HIV-infected women and their HIV-negative primary partners, so that mutual ground can be established for calculation of risk and consideration of options for risk reduction (e.g., engaging in a broader

spectrum of sexual interactions including less risky alternatives to unprotected insertive intercourse, use of the female condom). An absolutist approach to condom use on the part of health care providers may have limited value for both HIV-infected women and their male partners, causing women to live in fear and guilt about their sexual activity and their partners to angrily rebel against efforts to control personal behaviors reflecting on their manhood. Rather, facilitating open dialogue about sexual and emotional intimacy between individual partners in HIV-serodiscordant couples may be more promising as an intervention for women who are HIV infected.

Our second recommendation concerns the importance of tailoring sexual risk reduction interventions to the needs of HIV-serodiscordant partners, particularly those in established, long-term, primary relationships. Other studies have pointed out the importance of secondary prevention of HIV in the context of primary relationships. 4,42,43 Results from the California Partners Study II indicated that 45% of heterosexual, HIV-serodiscordant partners engaged in unprotected sexual intercourse on a regular basis. 19 In another study, comparison of HIV-infected persons with casual and primary serodiscordant partners showed that rates of unprotected sexual intercourse were greater with primary partners than with casual partners.4

What is not so clear in the literature about HIV-serodiscordant couples in the United States to date is how experiences and needs might differ depending on who in the relationship is HIV infected, the woman or the man. Our findings suggest that gender power relations may differentiate these relationships between serodiscordant partners. An international study about positive and negative life events experienced by serodiscordant couples following HIV diagnosis lends some credence to our assertion. Data collected in 3 developing countries showed that couples consisting of an HIV-positive woman and an HIVnegative man were more likely to report breakup of a marriage and breakup of a sexual relationship than were couples consisting of an HIV-positive man and an HIV-negative woman. HIV diagnosis was associated with the strengthening of sexual relationships between serodiscordant partners, except when it

was the woman who was HIV positive. 44 The authors of the study concluded that HIVpositive women in relationships with serodiscordant partners might be particularly vulnerable to negative life events and thus need additional individual support and counseling services. Other international investigators have emphasized that men should be brought into the picture, recommending the conscientious involvement of male partners early in HIV-infected women's counseling and primary care as well as the development of malefocused interventions to curb coercive unprotected sexual behavior by male partners. 45,46 Still other researchers in sub-Saharan Africa have called for more couple-focused research and intervention as the best way to reduce risk behaviors and prevent seroconversion between serodiscordant partners.47

Our third recommendation is that assistance with secondary prevention be carried out at several levels-help for individual women who are HIV infected, help for the men who are their partners, and help for couples. Our findings suggest that HIV-infected women in heterosexual relationships with serodiscordant partners are likely to need targeted, individual support in coping with oblivious or obstinate male partners who will not practice safe sex. Our findings also suggest that HIV-negative male partners may have complex reactions of their own to female partners' HIV infection, which may fuel their refusals to use condoms, and so they may need targeted intervention as well. Qualitative studies about men's experiences in sexual relationships with women who are HIV infected are needed to more fully understand the interpersonal dynamics of serodiscordance and sexual risk reduction. Couple-focused behavioral interventions to reduce HIV transmission risk seem appropriate as well but have not yet been widely researched or implemented in community settings in the United States.4 Future research should use experimental designs to test a wide range of interventions to reduce unprotected sexual intercourse between serodiscordant partners.

Our fourth recommendation comes from the finding that a majority of our sample of HIV-infected women was not sexually active over the 2 years. The consequences of abstinence and what it means to women living

with HIV have not been well studied, leaving gaps in our understanding. Research is needed to answer questions such as, Do some women living with HIV actively choose a position of sexual abstinence or are they relegated to it? How is libido affected by the physiological and social changes women may experience with HIV diagnosis or HIV-related illness? What are physical health and psychosocial outcomes of abstaining from sexual activities? Is personal empowerment or liberation from dominating relationships associated with sexual abstinence? Are the needs of abstinent women being met in HIV care and social service environments?

Conclusions

Although a clear and continuous pattern of experience emerged from participants' poignant narratives of sexual risk, we caution against generalizing from the conclusions of this qualitative study. Given the relatively small, purposive sample, experiences of these participants cannot be taken to represent the experiences of all women who are HIV infected. In particular, the subsample of 9 women on whom we focused this analysis, those who engaged in unsafe sex with serodiscordant primary partners, cannot possibly represent the breadth of sexual risk experiences HIV-infected women may have. At best, knowledge gained from this study might be transferable to other contexts involving similarly situated women.⁴⁸ We humbly offer our interpretations and recommendations with the hope that researchers, clinicians, and policymakers might gain insights they can apply, thereby improving conditions for women living with HIV.

About the Authors

Patricia E. Stevens and Loren Galvao are with the College of Nursing, University of Wisconsin, Milwaukee, and also with the Center for Urban Population Health,

Requests for reprints should be sent to Patricia E. Stevens, PO Box 413, University of Wisconsin College of Nursing, Milwaukee, WI 53201 (e-mail: pstevens@

This article was accepted March 13, 2006.

Contributors

P.E. Stevens designed and conducted the study, analyzed the data, and wrote the article. L. Galvao assisted with data analysis and writing of the article.

Acknowledgments

This research was supported by the National Institute of Nursing Research and the National Institute on Drug Abuse (grant NIH R01 NR04840).

The authors wish to acknowledge the collaboration of Aaron G. Buseh, Eugenie Hildebrandt, Sharon M. Keigher, Sandra K. Plach, Beth Rodgers, Sarah Morgan, Bev Zabler, and all the women who so diligently and generously participated in this longitudinal study.

Human Participant Protection

This study was approved by the University of Wisconsin, Milwaukee, institutional review board.

References

- 1. Centers for Disease Control and Prevention. Advancing HIV prevention: new strategies for a changing epidemic-United States, 2003. MMWR Morb Mortal Wkly Rep. 2003;52(15):329-332.
- 2. Centers for Disease Control and Prevention. Incorporating HIV prevention into the medical care of persons living with HIV. MMWR Morb Mortal Wkly Rep. 2003;52(RR12):1-24.
- Crepaz N, Marks G. Towards an understanding of sexual risk behavior in people living with HIV: review of social, psychological, and medical findings. AIDS. 2002;16:135-149.
- Kalichman SC, Rompa D, Luke W, Austin J. HIV transmission risk behaviours among HIV-positive persons in serodiscordant relationships. Int J STD AIDS. 2002:13:677-682.
- 5. Miller M, Meyer L, Boufassa F. Sexual behavior changes and protease inhibitor therapy. AIDS. 2000;
- Bova C, Durante S. Sexual functioning among HIV-infected women. AIDS Patient Care STDs. 2003;
- Bersoff-Matcha SJ, Horgan MM, Fraser VJ, Mundy LM, Stoner BP. Sexually transmitted disease acquisition among women infected with human immunodeficiency virus type 1. J Infect Dis. 1998;178:1174-1177.
- Capps L, Peng G, Doyle M, El-Sadr W, Neaton JD. Sexually transmitted infections in women infected with the human immunodeficiency virus. Sex Transm Dis. 1998;25:443-447.
- Hankins C, Tran T, Lapointe N. Sexual behavior and pregnancy outcome in HIV-infected women. J Acquir Immune Defic Syndr Hum Retrovirol. 1998;18: 479 - 487
- 10. Marks G, Cantero PJ, Simoni JM. Is acculturation associated with sexual risk behaviours? An investigation of HIV-positive Latino men and women. AIDS Care. 1998;10:283-295.
- 11. Murphy DA, Mann T, O'Keefe Z, Rotheram-Borus MJ. Number of pregnancies, outcome expectancies, and social norms among HIV-infected young women. Health Psychol. 1998;17:470-475.
- 12. Wohl AR, Lu S, Odem S, Sorvillo F, Pegues CF, Kerndt PR. Sociodemographic and behavioral characteristics of African-American women with HIV and AIDS in Los Angeles County, 1990-1997. J Acquir Immune Defic Syndr Hum Retrovirol. 1998;19:413-420.
- 13. Erbelding EJ, Stanton D, Quinn TC, Rompalo A. Behavioral and biologic evidence of persistent high-risk

- behavior in an HIV primary care population. *AIDS*. 2000:14:297–301
- 14. Ciccarone DH, Kanouse DE, Collins RL, et al. Sex without disclosure of positive HIV serostatus in a US probability sample of persons receiving medical care for HIV infection. *Am J Public Health*. 2003;93: 949–954.
- 15. Weinhardt LS, Kelly JA, Brondino MJ, et al. HIV transmission risk behavior among men and women living with HIV in 4 cities in the United States. *J Acquir Immune Defic Syndr.* 2004;36:1057–1066.
- Heckman TG, Silverthorn M, Waltje A, Meyers M, Yarber W. HIV transmission risk practices in rural persons living with HIV disease. Sex Transm Dis. 2003; 30:134–136
- Catz SL, Meredith KL, Mundy LM. Women's HIV transmission risk perceptions and behaviors in the era of potent antiretroviral therapies. AIDS Educ Prev. 2001;13:239–251.
- Wilson TE, Gore ME, Greenblatt R, et al. Changes in sexual behavior among HIV-infected women after initiation of HAART. Am J Public Health. 2004;94: 1141–1146
- 19. Buchacz K, van der Straten A, Saul J, Shiboski SC, Gomez CA, Padian N. Sociodemographic, behavioral, and clinical correlates of inconsistent condom use in HIV-serodiscordant heterosexual couples. *J Acquir Immune Defic Syndr.* 2001;28:289–297.
- Van der Straten A, Gomez CA, Saul J, Quan J,
 Padian N. Sexual risk behaviors among heterosexual
 HIV serodiscordant couples in the era of post-exposure
 prevention and viral suppressive therapy. AIDS. 2000;
 14:F47–F54.
- 21. Manfrin-Ledet L, Porche DJ. The state of science: violence and HIV infection in women. *J Assoc Nurses AIDS Care*. 2003;14:56–68.
- 22. Logan TK, Cole J, Leukefeld C. Women, sex, and HIV: social and contextual factors, meta-analysis of published interventions, and implications for practice and research. *Psychol Bull.* 2002;128:851–885.
- Pulerwitz J, Amaro H, De Jong W, Gortmaker SL, Rudd R. Relationship power, condom use and HIV risk among women in the USA. AIDS Care. 2002;14: 789–800
- 24. Seage GR, Holte S, Gross M, et al. Case-crossover study of partner and situational factors for unprotected sex. *J Acquir Immune Defic Syndr.* 200002;31: 432–439.
- 25. Sherman SG, Latkin CA. Intimate relationship characteristics associated with condom use among drug users and their sex partners: a multilevel analysis. *Drug Alcohol Depend.* 2001;64:97–104.
- 26. Schiltz MA, Sandfort TG. HIV-positive people, risk and sexual behavior. *Soc Sci Med.* 2000;50: 1571–1588.
- 27. Hall JM, Stevens PE. Rigor in feminist research. *Adv Nurs Sci.* 1991;13:16–29.
- 28. Bruner EM. Ethnography as narrative. In: Turner VW, Bruner EM, eds. *The Anthropology of Experience*. Urbana: University of Illinois Press; 1986:139–155.
- Mischler EG. Research Interviewing: Context and Narrative. Cambridge, Mass: Harvard University Press; 1986
- 30. Polkinghorne DE. *Narrative Knowing and the Human Sciences*. Albany: State University of New York Press; 1988.

- 31. Sarbin TR. Narrative Psychology: The Storied Nature of Human Conduct. New York, NY: Praeger; 1986.
- 32. Riessman CK. *Narrative Analysis*. Newbury Park, Calif: Sage; 1993.
- 33. Biernacki P, Waldorf D. Snowball sampling: problems and techniques of chain referral sampling. *Sociol Methods Res.* 1981;10:141–163.
- 34. Edin K, Lein L. Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work. New York, NY: Russell Sage Foundation; 1997.
- 35. Polanyi L. Telling the American Story: A Structural and Cultural Analysis of Conversational Storytelling. Norwood, NJ: Ablex; 1985.
- Stevens PE. Lesbians' health-related experiences of care and noncare. West J Nurs Res. 1994;16: 639–659.
- 37. Stevens PE. The experiences of lesbians of color in health care encounters: narrative insights for improving access and quality. *J Lesbian Stud.* 1998;2: 77–94
- 38. Stevens PE, Hall JM, Meleis AI. Narratives as a basis for culturally relevant holistic care: ethnicity and everyday experiences of women clerical workers. *Holist Nurs Pract.* 1992:6:49–58.
- 39. Ayres L, Kavanaugh K, Knafl KA. Within-case and across-case approaches to qualitative data analysis. *Qual Health Res.* 2003;13:871–883.
- Baeten JM, Overbaugh J. Measuring the infectiousness of persons with HIV-1: opportunities for preventing sexual HIV-1 transmission. *Curr HIV Res.* 2003;1: 69–86
- 41. Varghese B, Maher JE, Peterman TA, Branson BM, Steketee RW. Reducing the risk of sexual HIV transmission: quantifying the risk on the basis of choice of partner, sex act, and condom use. *Sex Transm Dis.* 2002:29:38–43.
- 42. Beckerman NL. Couples coping with discordant HIV status. *AIDS Patient Care STDs.* 2002;16: 55–59.
- 43. Pomeroy EC, Green DL, Van Laningham L. Couples who care: the effectiveness of a psychoeducational group intervention for HIV serodiscordant couples. *Res Soc Work Pract.* 2002;12:238–252.
- 44. Grinstead OA, Gregorich SE, Choi KH, Coates T, and the Voluntary HIV-1 Counselling and Testing Efficacy Study Group. Positive and negative life events after counseling and testing: the Voluntary HIV-1 Counselling and Testing Efficacy Study. AIDS. 2001; 15:1045–1052.
- 45. Maman S, Mbwambo JK, Hogan NM, Weiss E, Kilonzo GP, Sweat MD. High rates and positive outcomes of HIV-serostatus disclosure to sexual partners: reasons for cautious optimism from a voluntary counseling and testing clinic in Dar es Salaam, Tanzania. *AIDS Behav.* 2003;7:373–382.
- 46. Roth DL, Stewart KE, Clay OJ, van der Straten A, Karita E, Allen S. Sexual practices of HIV discordant and concordant couples in Rwanda: effects of a testing and counseling programme for men. *Int J STD AIDS*. 2001:12:181–188.
- 47. Painter TM. Voluntary counseling and testing for couples: a high-leverage intervention for HIV/AIDS prevention in sub-Saharan Africa. *Soc Sci Med.* 2001; 53:1397–1411.
- 48. Lincoln YS, Guba EG. *Naturalistic Inquiry*. Beverly Hills, Calif: Sage; 1985.

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